

MINTZ LEVIN

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September 21, 2016

Redacted -- For Public Inspection

Via Electronic Filing

Marlene H. Dortch, Secretary
Office of the Secretary
Federal Communications Communication
445 12th Street, SW
Washington, DC 20554

Re: Notice of Ex Parte In the matter of *Connect America Fund* (WC Docket No. 10-90); *ETC Annual Reports and Certifications* (WC Docket No. 14-58); *Rural Broadband Experiments* (WC Docket No. 14-259)

Dear Ms. Dortch,

On September 19, Michael Morgenstern, consultant for Southern Tier Wireless ("STW"), along with Geoff Why of Mintz Levin met with Carol Mattey, Alexander Minard, Katie King, and Heidi Lankau from the Wireline Competition Bureau; and Rita Cookmeyer and Eliot Maenner from the Wireless Telecommunications Bureau. The purpose of these meetings was to discuss the assignment of weights for the upcoming Connect America Fund II reverse auction.

STW presented new weights for the FCC to consider when determining how to design the CAF II auction. These weights are different from their initial proposal.¹ STW provided detailed cost data to support the assigned weights.² In addition, STW discussed the goals of the auction and the interplay between broadband speed, unserved locations, and bidding price.

Pursuant to Section 1.206 of the Commission's rules, this letter is being filed via ECFS, and a copy will be provided via email to the attendees. If you have any questions, feel free to contact me at 617-348-4484.

Very truly yours,



Geoffrey G. Why

Cc: Carol Mattey, Deputy Bureau Chief, Wireline Competition Bureau
Alexander Minard, Deputy Division Chief, Wireline Competition Bureau
Katie King, Wireline Competition Bureau
Heidi Lankau, Wireline Competition Bureau
Rita Cookmeyer, Wireless Telecommunications Bureau
Eliot Maenner, Wireless Telecommunications Bureau

¹ See Comments Southern Tier Wireless, WC Docket No. 10-90 et. al, (filed July 20, 2016), and Reply Comments Southern Tier Wireless, WC Docket No. 10-90 et. al., (filed Aug. 5, 2016).

² See Attachment A.

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

BOSTON | LONDON | LOS ANGELES | NEW YORK | SAN DIEGO | SAN FRANCISCO | STAMFORD | WASHINGTON

September 21, 2016

Via Hand Delivery

Marlene H. Dortch, Secretary
Office of the Secretary
Federal Communications Communication
445 12th Street, SW
Washington, DC 20554

Re: In the matter of *Connect America Fund* (WC Docket No. 10-90); *ETC Annual Reports and Certifications* (WC Docket No. 14-58); *Rural Broadband Experiments* (WC Docket No. 14-259) – Request for Confidential Treatment

Dear Ms. Dortch,

Pursuant to Sections 0.457 and 0.459 of the FCC's rules, Southern Tier Wireless ("STW") respectfully requests that the Commission withhold from public inspection and give confidential treatment to the Power Point Presentation, titled - CAF 2 Supplemental Information ("Attachment A"). The Commission is asked to withhold from public inspection all redacted portions of Attachment A. In the event the Commission determines to deny this confidentiality request, STW respectfully requests notification and immediate return of the Presentation in accordance with Section 0.459(e) of the Commission's rules.^{1/}

The FCC and the Freedom of Information Act ("FOIA") recognize the need to protect commercial and financial information. Specifically, FOIA Exemption 4 permits parties to withhold from public inspection "trade secrets and commercial or financial information obtained from a person and privileged or confidential."^{2/} Commercial or financial information is confidential under FOIA if its disclosure will cause substantial harm to the competitive position of the entity from which the information was obtained.^{3/} In conformance with this statutory mandate, the Commission allows parties seeking to withhold materials from public inspection under FOIA Exemption 4 to file a request for non-disclosure pursuant to the requirements of Section 0.459.^{4/} If a party who submits materials which it wishes withheld from public inspection shows that the materials contain trade secrets or privileged or confidential

^{1/} 47 C.F.R. § 0.459(e).

^{2/} See 5 U.S.C. § 552(b)(4).

^{3/} See *Nat'l Parks and Conservation Assoc. v. Morton*, 498 F.2d 765, 770 (D.C. Cir. 1974); *Critical Mass Energy Project v. NRC*, 975 F.2d 871, 879-90 (D.C. Cir. 1992).

^{4/} See 47 C.F.R. §§ 0.457(d)(2), 0.459.

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commercial, financial or technical data, the materials will not be made routinely available for inspection.^{5/} Accordingly, pursuant to the Commission's Rules, STW submits the following explaining the nature of this request for confidential treatment.

- STW seeks confidential treatment of Attachment A to the attached ex parte letter filed in this proceeding. Attachment A provides confidential financial information on the costs of building broadband in rural locations. STW is submitting this financial information to show how STW derived auction weights and their connection to the cost of rural broadband build. STW is also submitting a redacted version of Attachment A for the public record.
- Attachment A contains highly sensitive, confidential, and proprietary financial information about STW's cost to build rural broadband. STW treats such information as highly confidential and does not disclose it to third parties not involved in STW operations. The redacted information would not customarily be released by the persons from whom it is obtained and is therefore covered by Exemption 4 of FOIA when, as here, it is submitted by such persons to the Government.
- Release of the financial data contained in Attachment A would competitively harm STW. In addition, the financial data is not generally available to the public and has not been disseminated to non-STW personnel.

For the foregoing reasons, STW respectfully requests that Attachment A be granted confidential status and be withheld from public inspection. If you have any questions, feel free to contact me at 617-348-4484.

Very truly yours,



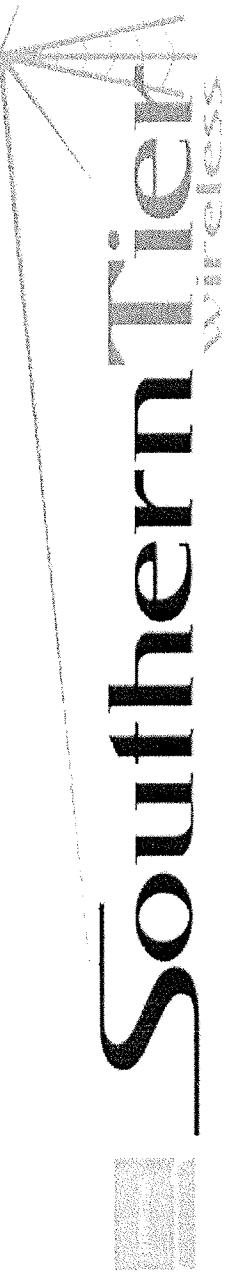
Geoffrey G. Why

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^{5/} See 47 C.F.R. § 0.457(d)(2).

ATTACHMENT A



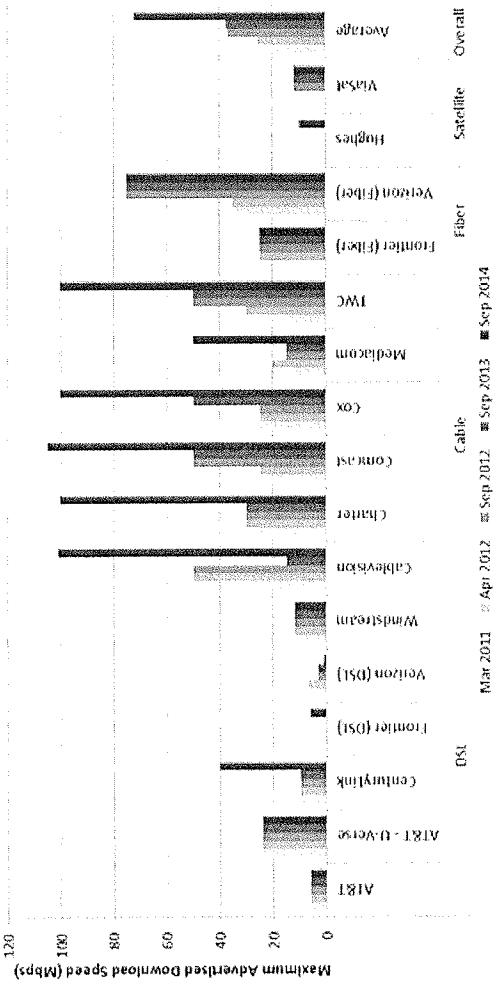
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CAF 2 Auction
Redacted Supplemental Information
Provided to the FCC by
Southern Tier Wireless
September 2016

Available Speeds by Provider

- The FCC's Measuring Broadband America report shows available speed tiers substantively above what is available in the CAF areas
 - Many providers in the US offer speeds up to 100 mbps
 - In the CAF-eligible areas, most locations get on average less than 6 mbps

Tech-note	Company	Speed Tiers (download)			Speed Tiers (upload)		
DSL	A&T-DSL	3	6	12	0.354	0.512	3
	A&T-Universe	6	12	18	1	15	
	CenturyLink	1.5	3	7	0.256	0.64	0.763
	Frontier DSL	1	3	6	0.354	0.768	5
Cable	Verizon	0.5-1.0	1.1-3.0	6	0.354	0.584	0.788
	Windstream	3	6	12	0.758		
	Cablevision	15	30	100	5	25	35
	Charter	15	30	60	3	4	
Fiber	Comcast	3	25	50	0.758	5	10
	Cox	5	25	50	100	1	5
	Mediacom	15	30	50	100	1	5
	TNC	15	30	50	100	1	2
Satellite	Frontier Fiber	25	50	75	10	25	5
	Verizon Fiber	15	25	35	25	35	50
	Hughes	5	10	15	1	25	75
	Viasat/Esate	12			3		



Rural Broadband Deployment Costs

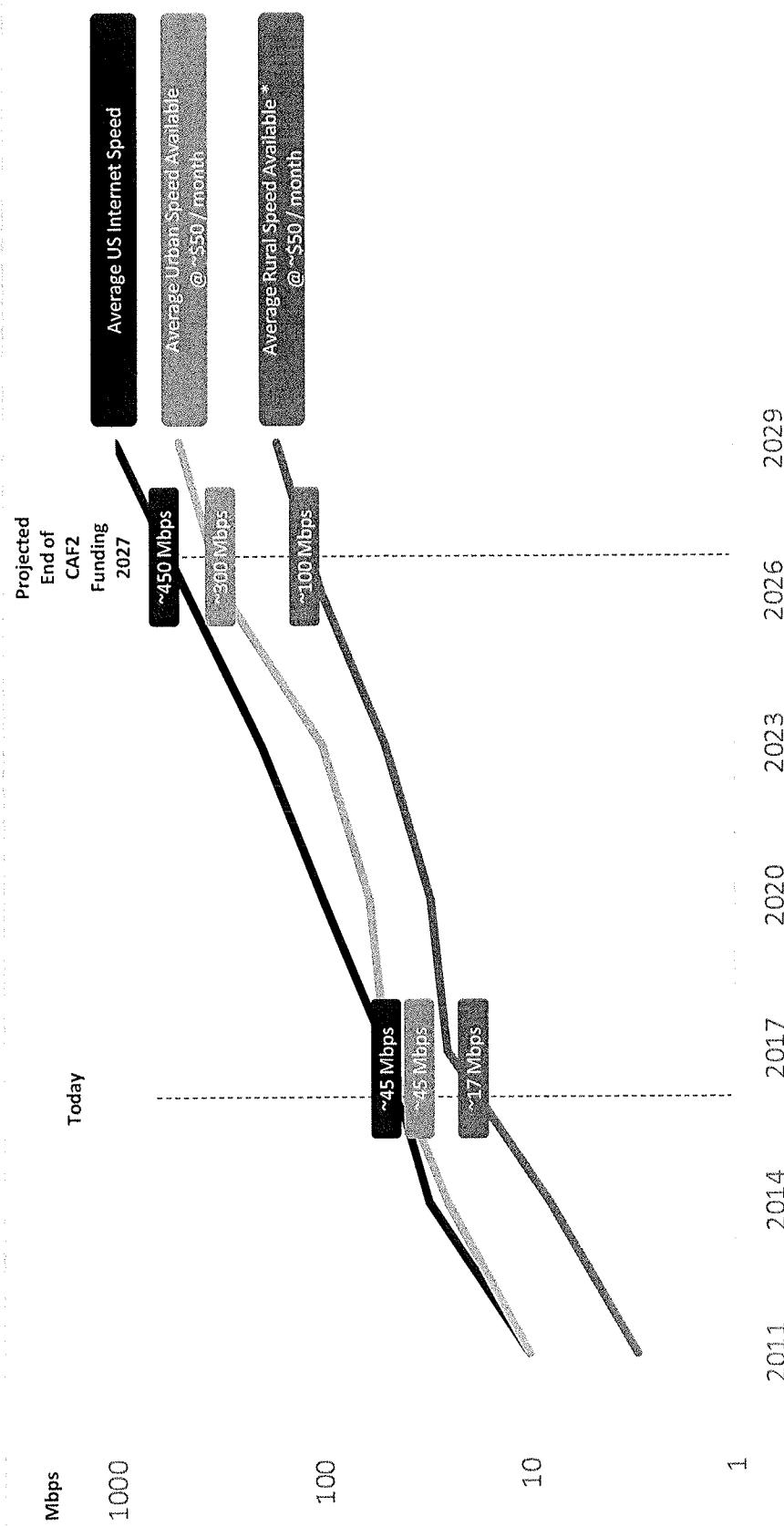
- Rural broadband network deployment costs range from \$900 / location to \$5,000+ / location

Tier 1 – 10 mbps (Satellite as least expensive proxy)	<ul style="list-style-type: none"> • Variable Cost: Minimal • Fixed Cost: ~\$650M able to serve ~720,000 users @ 10mbps = ~\$900 / location* • ~5 years before bandwidth/throughput capabilities becomes obsolete, 25 year life of hardware <p>\$900 / location</p>
Tier 2 – 25 mbps (Fixed wireless as least expensive proxy)	<ul style="list-style-type: none"> • Variable Cost: \$20 / month (administration, radio depreciation, bandwidth, truck-rolls, etc.) • Fixed Cost: ~\$570M able to serve ~500,000 users @ 25mbps = ~\$1,200 / location** • ~5 years before bandwidth/throughput capabilities becomes obsolete, 10 year life of hardware <p>\$1,200+ / location</p>
Tier 3 – 100 mbps (Co-axial cable as least expensive proxy)	<ul style="list-style-type: none"> • Variable Cost: \$50 / month (administration, equipment depreciation, bandwidth, truck-rolls, etc.) • Fixed Cost: \$3,000+ per rural location *** • ~10 years before bandwidth/throughput capabilities becomes obsolete, 25 year life of hardware <p>\$4,000+ / location</p>
Tier 4 – 1 gbps (Fiber as least expensive proxy)	<ul style="list-style-type: none"> • Variable Cost: \$60 / month (administration, equipment depreciation, bandwidth, truck-rolls, etc.) • Fixed Cost: \$4,000+ per rural location **** • ~20 years before bandwidth/throughput capabilities becomes obsolete, 25 year life of hardware <p>\$5,000+ / location</p>

Source: * ViaSat2. ** National Broadband Network (Australia's national network). ***Rural Coax deployments projects (see Appendix). ****Rural FTTH deployments (see Appendix)

Present and Future Broadband Speeds

- Rural speeds are forecast to lag behind urban speeds for the next 10+ years, though both speeds will grow at similar rates



Source: Percipio, Cisco VNI, Speedtest.net

Note: * Excluding CAF territories

Revised Southern Tier Wireless Proposed Weights for CAF2 Auction

- Actual RURAL costs for each of the tiers should inform the weights – otherwise the auction will unintentionally be biased towards a particular tier by design

Tier	Rural Cost/Premise	Cost/Premise – Minimum	Recommended Weights
Minimum	\$900	\$0	0
Baseline	\$1,200	\$300	7
Above-Baseline	\$4,000	\$3,100	76
Gigabit	\$5,000	\$4,100	100

The diagram consists of three downward-pointing arrows. The first arrow connects the 'Baseline' row to the 'Subtract the minimum cost to pass to set a baseline of zero' box. The second arrow connects the 'Above-Baseline' row to the 'Divide by the Maximum (\$4,100), round, and multiply by 100 to arrive at the recommended weights' box. The third arrow connects the 'Gigabit' row to the same 'Divide...' box.

Appendix

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Tier 3 and 4 Detailed Costs

Rural Coax Build Costs

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- Rural coax builds can cost more than 10x the average for urban/suburban geographies

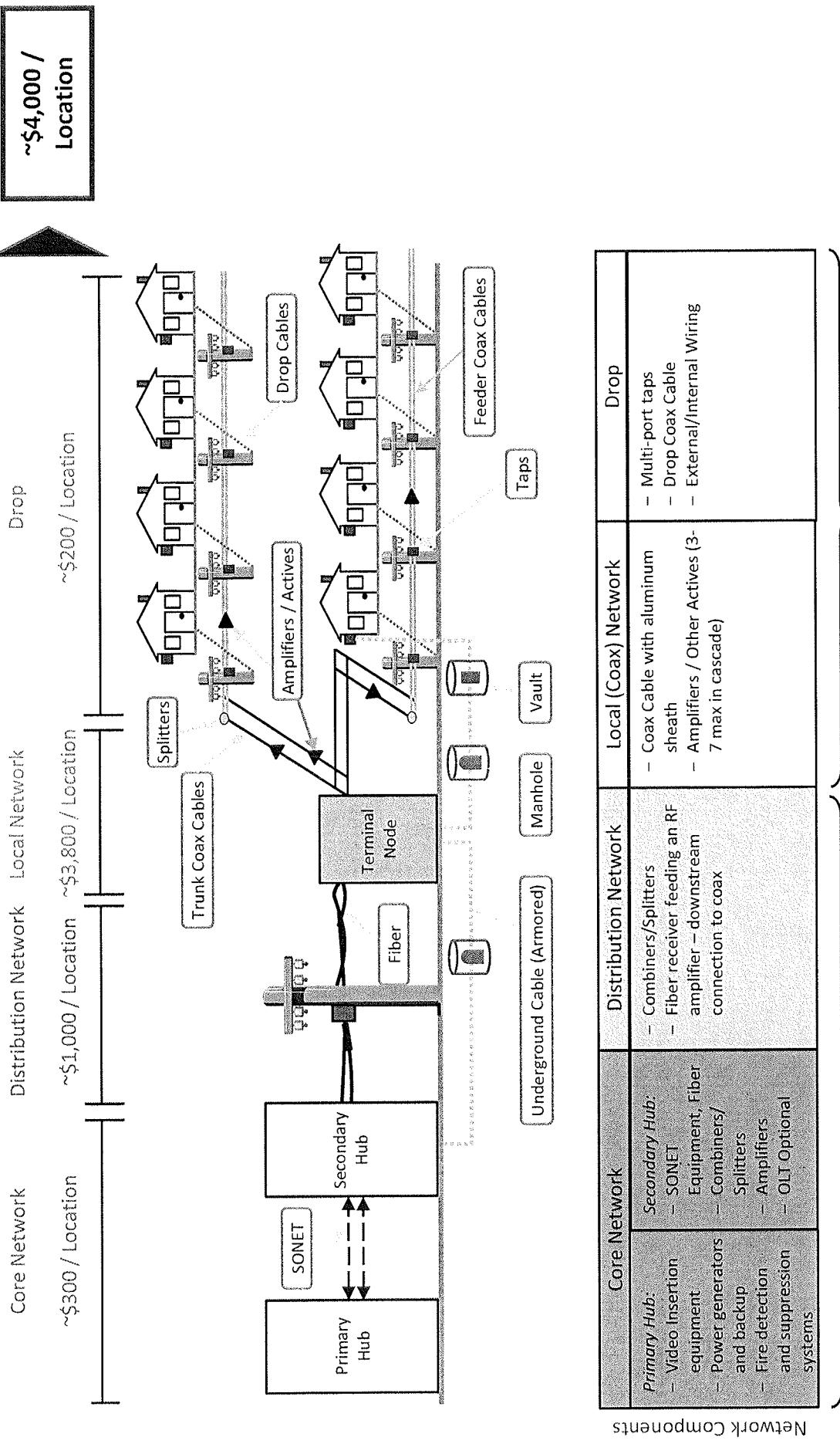
Vermont/Comcast Cable Build	\$4,100
Southern Tier Estimated Cost	Redacted
Massachusetts Rural Cable Builds	\$2,000-\$7,000
TWC Rural New York (near-net)	\$2,600
Comcast Rural Cable Builds (more dense than CAF2 areas)	\$1,800
TWC Rural Cable Builds (more dense than CAF2 areas)	\$1,600
Average Urban/Suburban Coax Deployment	\$400

Source: RS Fiber, MBI, Jaguar, Percipio

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Rural Coax Build Costs

- Co-axial network extensions typically require local network and drop expenses, but not Core or Distribution expenses since these network components have already been built



Rural Fiber Build Costs

Redacted Version – For Public Inspection

- Rural fiber builds can often cost more than 7x the average for urban/suburban geographies

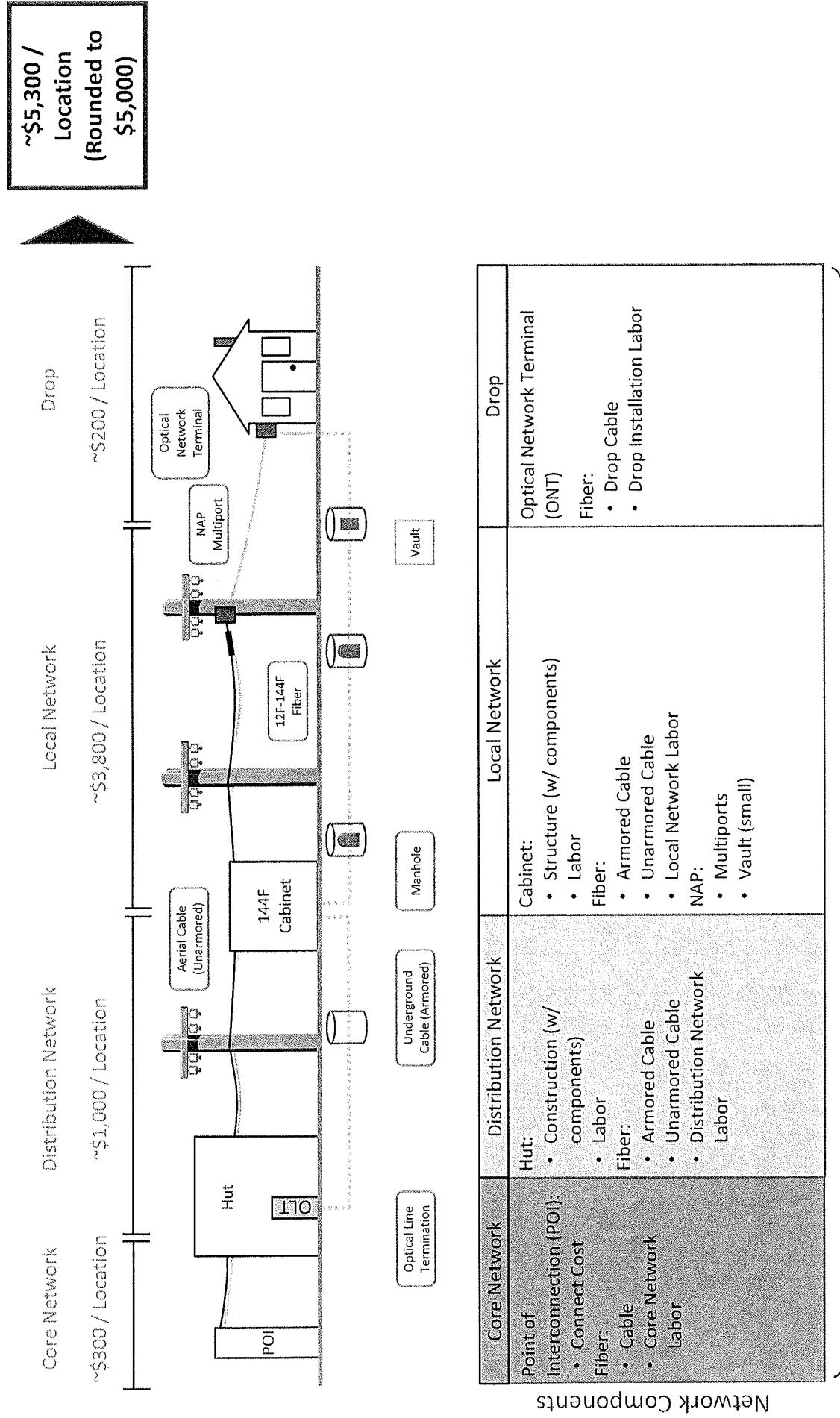
RS Fiber MN (2016)	\$7,500
Nebraska Rural Independent Companies (2011)	\$5,300
Southern Tier Estimated Cost	Redacted
MBI MA (2016 - Proposed)	\$4,000
Jaguar MN (2009)	\$3,500
Average Urban/Suburban FTTH Deployment	\$700

**Rounded to \$5,000
On Pgs. 3 & 5**

Source: RS Fiber, MBI, Jaguar, BBC Magazine, Percipio

Rural Fiber Build Costs

- Fiber to the Home (FTTH) networks typically require Core, Distribution, Local and Drop costs



Example Rural Build Assumptions

<i>Category</i>	<i>Item</i>	<i>Input</i>
General Assumptions	Miles	20
	Locations / Mile	15
	Poles / Mile	33
% of Poles that would need this type of work	Heavy Make-ready % (replacing poles) Medium Make-ready % (repairing poles) Light Make-ready % (minor adjustments)	25% 12% 63%
% of Network	Core % of Distance Distribution % of Distance Local % of Distance	5% 20% 75%

Component Costs by Category

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Category	Item	Unit	Price	Example Quantity	Example Cost	Total Cost	Per Location
Make-ready	Heavy (replacing poles)	/pole			165		
	Medium (repairing poles)	/pole			79		
	Light (minor adjustments)	/pole			416		
Professional Service Costs	Leasing and permitting	\$/mi			20		
	Detailed engineering (Core and Distribution Only)	\$/mi			20		
	Make-ready engineering	\$/mi			20		
	Post construction activities	\$/mi			20		
Core / Hubs	Physical Structure	/unit		1	1		
	Power generators and backup	/unit			1		
	Fiber	/ft			5280		
	Make-Ready and Professional Service Costs (Share)						
Distribution Network	Splices/mile (combiners & splitters)	/mi			3.56		
	Fiber	/ft			21120		
	Make-Ready and Professional Service Costs (Share)						
Local Network	Local cable - materials and labor	/ft			79,200		
	Amplifier	/per 4 locations			56.25		
	Multi-port tap	/per location			225		
	Make-Ready and Professional Service Costs (Share)						
Drop	Multi-port tap	/per location			225		
	Drop cable - materials and labor	/ft per location			18,000		
	External/internal wiring	/per location			225		
Total	Total (Local & Drop Only)						
Total	Total (Local & Drop Only)						

Estimated Total Costs per Tier per Location

Estimated Total Cost	\$ Redacted
Locations	225
Estimated Tier 4 Cost / Location (including all network elements)	
Local Network as a % of Total Network	75%
Estimated Total Local Network & Drop Cost	\$ Redacted
Locations	225
Estimated Tier 3 Cost / Location (excluding Core and Distribution Network Elements)	